The future of networking

The year 2017 has been a watershed year for digital transformation in India, with an increased focus on customer/citizen experience as a key driver. Indian business leaders have widely embraced the idea that they need to be a "digital organization" to enable growth. Besides, the government's Digital India initiative has made notable strides, with more than 20 new projects under way. Spending on core technologies enabling digital transformation like software and information technology (IT) services soared, while the adoption of public cloud services became increasingly mainstream. But it is far from smooth sailing ahead for India's digital leaders.

In 2018, the digital hype of 2017 may turn into an uncomfortable reality for many businesses and governments—both globally and in India—as they stretch to make new platforms deliver. Cloud, mobile, the Internet of Things (IoT), everything-as-a-service—it's all happening. However, with research firm International Data Corp. (IDC) predicting that 60% of digital initiatives will be unable to scale due to lack of a strategic architecture, chief information officers are in for some challenging moments at the boardroom table.

It's not surprising. Traditional networking technology, which had been serving as the on-ramp to digital projects and connects increasingly far-flung users, was designed long before the cloud or IoT ever existed.

While the world at "either end of the pipes" has changed dramatically, networks haven't changed much since the 1990s. As organizations embraced disruptive technologies and hybrid networks added countless more users, applications and devices, legacy approaches to managing complex, distributed networks and routing traffic remained much the same—hardware-centric, manpower-intensive, rigid and error-prone.

As a result, these networks have the potential to be a major roadblock for Indian businesses and government, threatening early gains in this new wave of the cloud and digital business. There's a lot at stake in the current era of "disrupt or be disrupted". A fundamental rethink to networking—a revolution—is needed.

Enter the future of networking: Software-defined wide area networking, or SD-WAN, is a set of capabilities that enables the network to be more flexible and efficient—especially as businesses look to connect offices and workers to the cloud and for hybrid networks. SD-WAN supersedes the managing of individual network devices using arcane command line interface commands and scripts, automating some of the most complex network tasks. This makes organizations more agile, transforming the way they are able to innovate.

Poised to be an $8 billion global market by 2021 according to IDC, the emerging SD-WAN market is attracting a myriad of companies. Early use cases for SD-WAN paint the picture of an exciting new future that could have significant implications for India's manufacturing, healthcare, banking and retail industries, and more.

For example, one multinational manufacturer is using SD-WAN across its over 100 sites to transform network security, and dramatically reduce the cost and complexity of managing its large ecosystem of partners, joint ventures and customers. Another global retailer is leveraging SD-WAN to help in their store of the future, delivering a "millennial grade" user-experience to customers via rich media and in-store Wi-Fi. SD-WAN has also given one Australian start-up, SimplePay, the power to instantly scale the network to follow the pace of its global expansion and cloud growth without any security or performance compromises.

Each of these examples represents a revolution in networking: software-defined, application-centric and as agile as the business demands.

This starts with unified connectivity of a company's network connections—cloud, WAN and wireless local area networks—and includes complete visibility for end-users, networks and applications. Networks shouldn't be managed through the configuration of individual appliances or at the network/hardware layer, but rather policy-based orchestration naturally aligned to the language and priorities of business. Simply put: deploying and managing network services should be as intuitive as downloading apps onto your smartphone and as instant as spinning up compute and storage resources into a public cloud.

Taking a cloud-first approach to software brought about the first revolution in enterprise IT; a cloud-first approach to networking is set to catalyze the next leap forward. In India, where legacy players have traditionally dominated the networking industry, it can be tempting to go with what is known. But the strategies and technologies that worked yesterday are not suited to deliver results tomorrow. The time for a revolution is now.

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